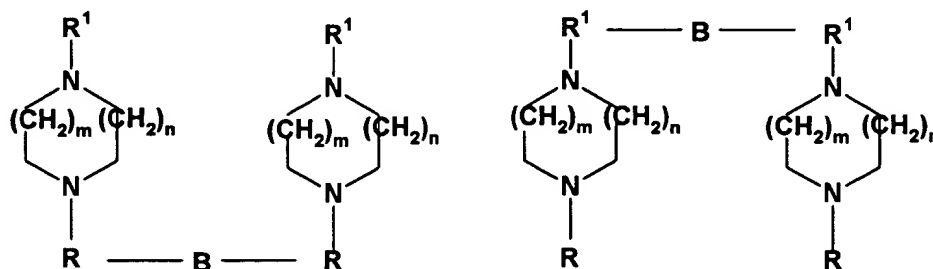


REMARKS

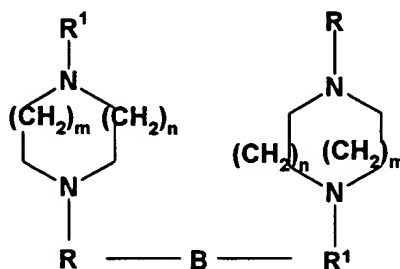
This is in response to the Office Action that was mailed on May 1, 2003. The scope of the claims herein has been sharply limited. It is noted in particular that the subject matter of original claims 2 and 3 has been incorporated into claim 1 as amended. Claim 1 as amended now reads as follows:

1. A dimeric diazacycloalkane derivative represented by Formula II, III or IV



(II)

(III)



(IV)

any of its enantiomers or any mixture thereof, an N oxide thereof, a pharmaceutically acceptable salt thereof, in a labelled or un-labelled form,

wherein,

n is 1; and

m is 2; and

R represents hydrogen, an alkyl group, a cycloalkyl group, a cycloalkylalkyl group, or an alkenyl group; and

R<sup>1</sup> represents pyridyl, pyridazinyl, quinolinyl or isoquinolinyl, which monocyclic or bicyclic heterocyclic group is optionally substituted one or more times with substituents selected from the group consisting of alkyl, alkoxy, cycloalkoxy, alkoxyalkoxy, alkoxyalkenyl, alkoxyalkynyl, alkynyl, alkenyl, alkenylthio, alkylseleno, alkoxycycloalkyl, hydroxyalkoxy, alkylthio, arylalkylthio, alkenoxy, alkynoxy, carboxylamido, arylalkylthio, arylthio, hydroxy, trifluoromethanesulfonyloxy, halogen; phenyl; phenyl substituted with alkyl, alkoxy, hydroxy, amino, or nitro; a pyrrolinyl, a piperidinyl, a tetrahydropyridinyl or a morpholinyl group; and

"R-B-R-" in Formula II represents a single bond bridge ("-", i.e. R and B are absent), or a bridging group of the formula "R-R-" (i.e. B is absent), or a bridging group of the formula "-R-" (i.e. R is absent in only one of the two compounds making up the dimeric substance); or

"R-B-R<sup>1</sup>" in Formula IV represents a single bond bridge ("-", i.e. R, B and R<sup>1</sup> are absent), or a bridging group of the formula "R-R<sup>1</sup>-" (i.e. B is absent); or

"R-B" in Formula IV represents a single bond bridge ("-", i.e. R and B are absent, R<sup>1</sup> is present); or

"R<sup>1</sup>-B-R<sup>1</sup>-" in Formula III represents a single bond bridge ("-", i.e. R<sup>1</sup> and B are absent), or a bridging group of the formula "R<sup>1</sup>-R<sup>1</sup>-" (i.e. B is absent), or a bridging group of the formula "-R<sup>1</sup>-" (i.e. R<sup>1</sup> is absent in only one of the two compounds making up the dimeric substance); or

"R<sup>1</sup>-B-R" in Formula IV represents a single bond bridge ("-", i.e. R, B and R<sup>1</sup> are absent), or a bridging group of the formula "R<sup>1</sup>-R-" (i.e. B is absent); or

"R<sup>1</sup>-B" in Formula IV represents a single bond bridge ("-", i.e. R<sup>1</sup> and B are absent, R is present); or

R and/or R<sup>1</sup>, together with the nitrogen atom to which they are attached, represent an alkyl-onium salt, a dialkyl-onium salt, a cycloalkyl-onium salt, an alkyl-cycloalkyl-onium salt, a dicycloalkyl-onium salt, an alkyl-cycloalkylalkyl-onium salt, a cycloalkyl-cycloalkylalkyl-onium salt, or a dicycloalkylalkyl-onium salt; and

B represents a single bond bridge ("-", i.e. B is absent), or a bridging element of the

formula "-ALK-", "-ALK-X-ALK-", "-X-ALK-X-", "-PHE-", "-X-PHE-X-", or "-ALK-PHE-ALK-"; wherein "ALK" represents a single bond bridge ("-", i.e. ALK is absent), or alkyl, alkenyl, or alkynyl; and "PHE" represents a phenylene (benzene-diyl) group; and X represents O, S, NH, N-alkyl or Se.

No new matter has been introduced by this Amendment. Claims 1, 4, 6-8, 12, and 14 are in the application.

Claims 1-8 and 12-14 were rejected as being drawn to an improper Markush group. Applicants respectfully traverse this rejection as not being based upon statutory or other authority. Nevertheless, in order to advance the prosecution of this application, the scope of the claims has been limited to recite what is clearly a proper Markush group.

At the top of page 4, the Office Action alleges that Applicants have not filed a certified copy of Danish application PA 1999 00571. However, on August 23, 2001, Applicants filed a claim for priority to Danish applications PA 1999 00571 and PA 1999 01504, along with certified copies of both applications. Enclosed for the convenience of the Examiner is a copy of a postcard receipt dated August 23, 2001, in which the PTO acknowledges receipt of 2 priority documents.

As stated on pages 4-8 of the Office Action, claims 1-5, 7, 8, and 12-14 were rejected under the first paragraph of 35 U.S.C. §112, on the ground of lack of enablement.

The Examiner alleged that the claims were too broad with respect to the scope of the compounds claimed (raising 'how to make' issues) and too vague with respect to the use (raising 'how to use' issues). These rejections have been obviated by reducing the scope of the compound claims. Also, the method of use claims, in addition to being amended by the reduction of compound scope in claim 1, have been amended to delete the reference to "diagnoses". Thus claim 12 is drawn to a method of using a relatively narrow group of nAChR modulators, and claim 14 is drawn to the use of the nAChR modulators to treat four specified conditions. It is respectfully submitted that the claims as amended satisfy the requirements of the first paragraph of the statute.

As stated on pages 8-15 of the Office Action, claims 1-8 and 12-16 were rejected under the second paragraph of 35 U.S.C. §112 as failing to define the invention properly. It is respectfully submitted that the claims as amended satisfy the requirements of the second paragraph of the statute.

Claims 1-4 were rejected under 35 U.S.C. §102(b) as being anticipated by two Stokbroekx references. Stokbroekx fails to teach or suggest the dimeric substances recited by claims 1 and 4 in their present form.

#### Conclusion

If the Examiner has any questions concerning this application, he is requested to

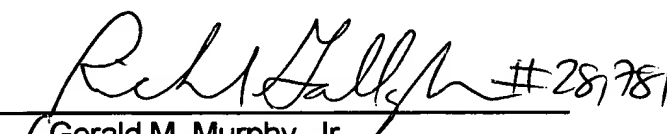
Serial No.: 09/934,531

contact Richard Gallagher, Reg. No. 28,781, at (703) 205-8008.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 CFR 1.16 or under 37 CFR 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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GMM/RG

Encl.: Copy of postcard receipt